

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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CENTRAL HUDSON GAS & ELECTRIC
CORPORATION,

Plaintiff,

02 Civ. 6297 (WCC)

- against -

**OPINION
AND ORDER**

THE TUG M/V SCOTT TURECAMO, her engines,
boilers, tackle, etc., THE BARGE
MARIA T., her engines, boilers, tackle,
etc., LAFARGE BUILDING MATERIALS, INC.,
f/k/a Blue Circle, Inc., and MORAN
TOWING CORPORATION,

Defendants.

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CONNER, Senior D.J.:

Plaintiff Central Hudson Gas & Electric Corporation (“Central Hudson”) brings this admiralty action against defendants the tug M/V Scott Turecamo, Official No. 1067705 (the “Tug”), the barge Maria T, Official No. 64930 (the “Barge”), LaFarge Building Materials, Inc. and Moran Towing Corp., seeking damages for losses incurred on August 8, 1999, when an anchor that was dragged by the Barge became caught on Central Hudson’s gas and electric piping lying on or near the bottom of the Hudson River in the vicinity of Poughkeepsie, New York, causing it severe damage.¹ This Court has admiralty jurisdiction pursuant to 28 U.S.C. § 1333. Defendants conceded liability for negligence, and the action was tried to the Court solely on the issue of damages. For the reasons that follow, we find that Central Hudson sustained damages in the amount of \$648,487.75, but that Central Hudson itself was comparatively negligent and that its negligence should be assigned twenty-five percent responsibility for the damage. The Court therefore finds that Central Hudson is entitled to an award of damages in the amount of \$486,365.81, plus prejudgment interest. The following opinion sets forth the Court’s Findings of Facts and Conclusions of Law pursuant to FED. R. CIV. P. 52(a).

BACKGROUND

Trial of the present action began on January 29, 2007 and lasted ten days. During the course of the trial, the Court heard the testimony of seventeen witnesses, including seven experts, and received in evidence 173 exhibits addressing the effect of the Incident on Central Hudson’s facilities, as well as the costs of responding to it. Specifically, Central Hudson called as witnesses: (1) Carl

¹ We hereinafter refer to the August 8, 1999 anchor dragging as the “Incident.”

Meyer, Central Hudson's President and Chief Operating Officer; (2) Bruce Sieving, Central Hudson's Manager of Business Development; (3) Lawrence Cambalik, a Gas Operations Engineer employed by Central Hudson; (4) David Schultz, a Gas Operations Engineer employed by Central Hudson; (5) David Merte, Central Hudson's Director of Gas Operations; (6) Karl Schoeberl, a Senior Environmental Coordinator employed by Central Hudson; (6) Michael Gallucci, Central Hudson's Safety Director; (7) Tera Wacławski Stoner, an Associate Engineer employed by Central Hudson; (8) Joseph Croshier, head of Central Hudson's Accounting Department, (9) Hans Schick, Senior Engineer and Section Head of Central Hudson's Gas and Mechanical Engineering Department; (10) Robin Dill, an expert in evaluating soil conditions, with particular relation to horizontal directional drilling ("HDD");² (11) John Hair, an expert in HDD techniques and drilling underwater crossings; (12) Allen Crabtree, an expert in environmental and regulatory issues; and (13) Edward Gonzales, an expert in pipeline construction.

Defendants presented the testimony of three expert witnesses, namely: (1) James DeMetro, an expert in natural gas system operations and analysis; (2) Eric Skonberg, an expert in pipeline installation, with an emphasis on HDD; and (3) J. Roger Trettel, an expert in environmental and permitting issues. The Court's Findings of Fact are based on the extensive record developed over the course of the bench trial during which the parties had a full and fair opportunity to present their cases to the Court, and the Court observed the demeanor of the witnesses and evaluated their credibility.

² HDD is a technique used for spanning otherwise-inaccessible areas with piping, whereby a path is drilled beneath the obstacle, emerging from the earth at a safe, accessible location.

DISCUSSION

I. The Central Hudson Gas Distribution System

Central Hudson is a regulated transmission and distribution utility that delivers natural gas and electricity to commercial and residential customers in New York's Mid-Hudson Valley. (Tr. 44-45.) In connection with the natural gas aspect of its business, Central Hudson is the owner and operator of a network of distribution and transmission pipelines, which it uses to transport natural gas to its customers. (Statement of Agreed Facts ¶ 3;³ Tr. 49-50.) The earliest parts of Central Hudson's gas system date back to the early twentieth century. (Tr. 43-44.) In those days, there was no infrastructure of high pressure cross-country gas transmission lines capable of delivering natural gas from Canada or the Gulf of Mexico. Instead, gas was manufactured and distributed locally. (Tr. 101-03.) Central Hudson had several such manufacturing plants, including one at a location called the Kingston Holder Station and another at a location called the Poughkeepsie Receival Station. (Tr. 102; Joint Ex. 5.)

In the early 1930s, Central Hudson constructed a distribution pipeline with a maximum allowable operating pressure ("MAOP") of 60 pounds per square inch ("psi") connecting the Poughkeepsie Receival Station to the Kingston Holder Station. (Tr. 103; Joint Exs. 5-6.) This so-called "PK Line" allowed Central Hudson to deliver gas from these two manufacturing plants to its customers along that line. (Tr. 102-03.) The PK Line ran from the Poughkeepsie Receival Station, west across the Hudson River at a location just north of the Poughkeepsie railroad bridge, and then north along the west shore of the river to the Kingston Holder Station. (SAF ¶ 15; Tr. 51.)

³ We hereinafter use the abbreviation "SAF" to refer to the parties' Statement of Agreed Facts.

In the years following the installation of the PK Line, Central Hudson's method of supplying gas to its customers changed dramatically. Instead of manufacturing gas in its own facilities, the practice of "importing" natural gas over high pressure interstate gas transmission pipelines owned and operated by third parties became more prevalent. (Tr. 104-05.) Accordingly, over time, Central Hudson began constructing its own medium pressure (*i.e.*, approximately 565 psi) gas transmission system designed to receive natural gas from third-party interstate transmission companies and to distribute that natural gas throughout its own network of pipes. (Tr. 104-06.) To this end, in the early 1950s, Central Hudson constructed a new transmission pipeline crossing the Hudson River in the same location where the PK Line crossed the river. (SAF ¶ 21; Tr. 104-07).

This new river crossing, which was part of Central Hudson's TP transmission pipeline connecting Tuxedo to Poughkeepsie, consisted of two parallel eight-inch-diameter pipelines each having a MAOP of 565 psi. (SAF ¶ 22.) These pipes were laid directly over the older PK Line. (SAF ¶ 21.) The purpose of the TP river crossing was to provide a new supply of natural gas to the city of Poughkeepsie. As Central Hudson's system grew, it also provided an important connection between Central Hudson's transmission lines on the west shore of the Hudson River and those on the east shore. During the mid-1990s, Central Hudson constructed another transmission pipeline across the river connecting the MP Pipeline (*i.e.*, its transmission line running from Mahopac to Poughkeepsie) on the east side of the river to the TP Pipeline on the west side. This river crossing was south of the TP river crossing and was known as the MPR Pipeline. This pipeline was sixteen inches in diameter and had a MAOP of 750 psi. (Tr. 191-92; Joint Ex. 6.)

As it existed in August 1999, Central Hudson's natural gas transmission system consisted of several pipelines that ran generally north-south along both sides of the Hudson River with certain

connections across the river. This system was supplied through four “city gates,” two on each side of the river. The city gates are interfaces with major third-party interstate gas transmission systems, namely the Algonquin Gas Transmission Line (“Algonquin”), the Columbia Gas Transmission Line (“Columbia”), the Iroquois Gas Transmission Line (“Iroquois”) and the Tenneco Gas Transmission Line (“Tenneco”). Specifically, Tenneco connects to Central Hudson’s system from the north, on the west shore of the Hudson River; Iroquois connects to Central Hudson’s system from the east, on the east side of the river; Columbia connects to Central Hudson’s system from the south, on the west side of the river; and Algonquin connects to Central Hudson’s system from the south, on the east side of the river. (Tr. 107; Joint Ex. 5.)

Configured in this manner, Central Hudson’s transmission pipeline system allows it to procure natural gas from four major interstate sources, two on each side of the Hudson River. (Tr. 244-46; Joint Ex. 5.) Once the gas enters Central Hudson’s system, Central Hudson’s own transmission lines transport the natural gas through the system, where it ultimately reaches low-pressure distribution lines, such as the 60 psi PK Line. The transmission lines are connected to Central Hudson’s distribution lines through regulator stations, which decrease the pressure to the lower pressures required to supply customers. (Tr. 113, 135.)

In 1999, the gas manufacturing plants at the Kingston Holder Station and the Poughkeepsie Receival Station were inactive, although those names were still used to describe the relevant geographical areas of the Central Hudson system. (Joint Ex. 5.) On the east side of the Hudson River, the southern end of the PK Line was connected to Central Hudson’s TP transmission line through a regulator station located in Poughkeepsie that “stepped down” the operating pressure from 565 psi to 60 psi. Through that regulator station, the PK Line was also capable of receiving natural

gas from Central Hudson's MP transmission line. (Joint Ex. 5.)

On the west side of the Hudson River, the northern end of the PK Line interfaced with Central Hudson's AH transmission line (Albany to Highland) through a regulator station at the old Kingston Holder Station, which reduced the pressure from the AH Line's MAOP of 618 psi to the distribution pressure of 60 psi. (Joint Exs. 5 and 6.) In 1999, the PK Line did not interface with a southern source of natural gas on the west side of the Hudson River. (Joint Ex. 5.) With the natural gas supplied through these transmission interconnections, the PK Line supplied residential and commercial customers situated between Highland and Kingston along the west shore of the Hudson River.

Neither the PK nor the TP river crossings were trenched or placed beneath the riverbed by HDD; rather they were laid directly across the bottom of the river. (SAF ¶¶ 16, 21.) The water depth in this vicinity is approximately 50-60 feet. (Joint Ex. 99.) The PK river crossing was 3,125 feet in length from shore to shore. (SAF ¶ 19.)

An underwater survey conducted in September 1983 by Logan Diving, Inc. ("Logan") revealed that the PK river crossing had "significant amounts of exposure and suspension" (Joint Ex. 121 at LO 103). According to the report, 480 feet of the pipeline was exposed (*i.e.*, missing its protective coating) and 110 feet was suspended (*i.e.*, raised above the river bottom). (*Id.* at LO 104.) Logan recommended that "the suspensions that exceed twenty feet in length be stabilized by building cement bag piers" and advised that it would take approximately 600 bags to accomplish this project. (*Id.*)

Logan also observed substantial exposures and suspensions of the TP Lines and recommended similar measures to address those problems. (*Id.* at LO 102.) A further survey was

done of the PK and TP Lines by Petro-Chemical Associates, Inc. in late 1983. Their survey report noted further suspensions, “at least 4 feet above the bottom in some areas,” and specifically warned that “[a] line suspended (undercut) above the river bottom may be subject to damage[] by drifting debris and ships’ anchors.” (Joint Ex. 81 at CH 555, CH 553.) In 1991, Logan performed another underwater survey of Central Hudson’s river crossings, including the PK pipeline. (Joint Ex. 122.) Following completion of this survey, Logan reported that “[t]he exposure and suspension at this crossing has more than doubled since our inspection of September[] 1983.” (*Id.* at LO 182.) The report further noted that “[t]he pipeline is exposed and suspended for more than 2500’ at this crossing” (*id.*), an amount representing over eighty percent of the 3,125 foot crossing. Of this length of pipe, some 1,174 feet were suspended above the riverbed. (*Id.* at LO 182-83.)

Logan also found the TP Lines to be “exposed and suspended for the majority of this crossing.” (*Id.* at LO 179.) In its 1991 report, Logan recommended that Central Hudson take steps to stabilize the TP river crossing using the “cement bag repair method,” that is, supporting the lines with cement bag piers. (*Id.* at LO 181.) Logan further recommended that the repairs it suggested for the TP river crossing should also be made to the PK pipeline “to immobilize and stabilize this crossing” (*Id.* at LO 183.) Specifically, Logan recommended that the TP and PK pipelines be stabilized at any locations where they were suspended for spans of more than twenty feet. (*Id.* at LO 181.)

Central Hudson ultimately took steps to stabilize and protect the TP river crossing (Tr. 374-75), and its HR/DR electric cable crossings, (Tr. 1546-47), by covering portions of them with protective rock piles. Notwithstanding Logan’s recommendations, however, Central Hudson took no steps to protect the PK river crossing or in any way address the hazards revealed by the dive

reports. (Tr. 302-03, 374-75, 1583-84.)

II. The Incident and Central Hudson's Response

On August 8, 1999, the PK Line river crossing was severed by the Barge's dragging anchor while the Barge was being pushed southbound in the Hudson River by the Tug in the vicinity of the Poughkeepsie Railroad Bridge. (SAF ¶ 6.) The severing of the PK Line river crossing caused the immediate leakage of natural gas into the surrounding environment, and the dragging anchor also caused damage to other Central Hudson property. (SAF ¶¶ 7, 9 and 10.)

A. Emergency Response and Construction of the West Shore Regulator Station

In immediate response to the Incident, Central Hudson closed valves on the PK Line on both sides of the river. (Tr. 350.) Because Central Hudson was unsure which lines had been damaged, valves for the TP Lines were also closed. (Joint Ex. 17; Tr. 338, 350.) The day after the incident, Hans Schick, Section Head of Gas and Mechanical Engineering, assigned Lawrence Cambalik, another Central Hudson engineer, the responsibility of accompanying the divers to the scene so that they could survey the nature and extent of the damage to the TP and PK Line river crossings. (Tr. 1336-37.)

The divers discovered that, in addition to the severing of the PK Line and accompanying loss of gas, the protective epoxy coating on the TP river crossing suffered minor abrasion damage, but the pipeline did not rupture or sustain other, more significant damage. (SAF ¶ 9.) The value of the natural gas lost as a result of the damage to the PK pipeline was \$8,439. (*Id.* ¶ 11.) The damage to the TP Line was subsequently repaired by applying a new epoxy coating to the damaged pipe

segments. (*Id.* ¶ 9.) The divers also inspected Central Hudson’s various other gas and electric lines crossing the river in this vicinity. (*Id.* ¶¶ 8, 10.) Aside from minor damage to the rock cover on Central Hudson’s HR/DR electrical lines, however, no other damage was detected.⁴ (*Id.* ¶ 10.) The rock cover was replaced at a cost of \$6,700. (SAF ¶ 10.) Following the assessment of damages, metal blanks were inserted in the PK Line at flanges on both shores to ensure that no natural gas could enter the length of the PK Line in the river.

Following the incident, Central Hudson analyzed its gas transmission and distribution system to determine the impact of the loss of the PK river crossing. This included conducting computer modeling analysis using a software program produced by a company named Stoner/Advantica,⁵ which allowed Central Hudson to analyze existing gas pressures at various “nodes” along the PK Line given certain assumptions about anticipated loads and the remaining sources of natural gas to the line. (Tr. 1338-40; Pl. Exs. 139-40.)

Central Hudson’s analysis demonstrated that even with the loss of the PK river crossing, and

⁴ Additionally, Central Hudson conducted side scan sonar surveys of its crossings, including the area of the PK Line. Side scan sonar uses sound waves to discern the contours of the river bottom and anything upon or above it. (Tr. 343; Joint Ex.18). The sonar surveys were done after the initial diving survey partly in order to determine the extent of the anchor drag and thus aid Central Hudson in ascertaining which of its facilities were impacted. (Tr. 342- 43; Joint Ex.11.)

The initial diving report (Joint Ex. 23) advised Central Hudson that the AC and DC lines, which were obscured by silt, could not be inspected simply by observation. The silt above the lines had to be removed first. Although these measures required significant additional work, including obtaining the approval of the New York State Department of Environmental Conservation (“DEC”) and the United States Army Corps of Engineers (“ACOE”), Central Hudson obtained the required permits and ordered the inspection to be conducted. (Tr. 784- 90; Joint Exs. 47-50.) In light of the extensive damage suffered during the Incident, the Court finds Central Hudson’s decision to be reasonable and warranted under the circumstances.

⁵ Although she is skilled in its use, Tera Wacławski Stoner is not related to the makers of Stoner/Advantica software.

thus the southern supply of natural gas to the PK Line west of the Hudson River, the gas pressures along this line would remain adequate to serve every customer along the PK Line even on a “design day” (*i.e.*, a day that experiences the most severe weather conditions for which Central Hudson plans—namely twenty-four consecutive hours of temperatures of minus five degrees Fahrenheit). (Tr. 115, 231, 1342; Pl. Ex. 140.)

Central Hudson was concerned, however, that the loss of the southern supply of natural gas to the PK Line made it vulnerable in the event of a contingency impacting the availability of gas from a northern supply. (Tr. 566.) Accordingly, Schick prepared a memo dated August 25, 1999, setting forth several possible remedies, namely: (1) repairing the pipeline by replacing only the damaged segment of the pipe; (2) replacing the entire length of the crossing; (3) horizontally directionally drilling a new crossing 30 feet below the river bottom; or (4) abandoning the PK river crossing and installing a regulator station⁶ on the west shore to feed the southern end of the PK Line from the TP transmission line.⁷ (Joint Ex. 8.) Schick estimated the cost of each option respectively at: (1) \$2.0 to \$2.5 million; (2) \$3.0 to \$3.5 million; (3) \$2.5 to \$3.0 million; and (4) \$500,000 to \$700,000. (*Id.*) In concluding his memorandum, Schick recommended that Central Hudson pursue the fourth option and abandon the PK river crossing and install a regulator station on the west shore of the Hudson River. (Joint Ex. 8). Upon direct examination, Schick testified that by “abandonment of the river crossing” he meant that Central Hudson should abandon the existing, severed crossing

⁶ Because the TP Line operates at 565 psi and the PK Line operates at only 60 psi, the creation of a direct connection between the two pipes was not possible. Rather, a regulator station was required to “step down” the gas pressure at this connection. (Tr. 113.)

⁷ As explained below, this station would allow customers on the PK Line west of the Hudson River to receive natural gas from two major interstate transmission sources.

and construct another one. Schick's testimony in this regard, however, was not credible and was contradicted by his prior deposition testimony. Contrary to his statements at trial, it is clear that by "abandon" Schick meant to discontinue use of the PK crossing and never reconstruct it in any form. Notably, the memo also recommended renaming the new line (located on the west side of the Hudson River) connecting the proposed regulator station to the Kingston Holder the "HK," or Highland to Kingston, line because it would no longer connect Poughkeepsie to Kingston. (Tr. 1443-45; Joint Ex. 8.) Plainly, Schick's recommendation was that Central Hudson build the west shore regulator station and discontinue use of the river crossing, and it is this option that Central Hudson finally chose to pursue.

By building the west shore regulator station ("WSR"), Central Hudson was able to connect its users on the west side of the Hudson River to a second major interstate distribution source, namely, Columbia. In doing so, Central Hudson ensured that its system was sufficiently redundant, that is, customers on the west side of the Hudson River could be supplied by two alternate major high pressure sources—one in the north and one in the south, each of which alone was capable of meeting customer needs in the event of a failure of the other.⁸ (*See* Joint Exs. 5-6.)

Construction of the WSR was started in early September 1999 (Tr. 624) and was completed

⁸ We note, parenthetically, that Central Hudson's insistence on securing two sources of gas for customers on the PK Line was justified. The evidence clearly demonstrated that it is imprudent for a utility to rely only on one source to maintain continuous and reliable gas service to a significant number of customers. (Tr. 201-04.) Unlike electric outages, in which power can be restored without concern about the individual customers, a different situation pertains to gas users. (*Id.*) When gas service is lost, it cannot be restored generally, but instead requires manually re-lighting every gas-burning device at each individual customer's location. (*Id.*) There are approximately 2,000 customers serviced by the PK Line, which means that restoration of service would involve an extensive effort by Central Hudson personnel to ensure safety and reliability for every customer. (*Id.*) Plainly, such a process is time-consuming and laborious, and results in long periods during which time Central Hudson customers are deprived of their natural gas supply. (*Id.*)

in December of that year. (Tr. 644.) David Schultz, a Central Hudson engineer, was principally responsible for overseeing the project. (Tr. 562-66.) In addition to constructing the regulator station itself, Central Hudson cut out a short length of the PK Line on the west shore of the river and installed a gas outlet which was then connected to the regulator station feed, thus connecting the southern end of the PK Line with the northern end of the TP line on the west shore of the river. (Tr. 590.) By allowing customers on the west side of the Hudson River to receive gas from two major interstate sources, the WSR provided customers on the PK Line with gas service that is at least as reliable as it was before the incident, (Tr. 1457-58) and Central Hudson has adduced no credible evidence that this level of reliability will significantly decrease at any time in the foreseeable future.

In order to install the WSR, Central Hudson conducted a bidding process for the outside contractor work that was required. The lowest bid was from Granholm Underground Construction, Inc., which performed the work in accordance with the project's specifications. (Tr. 593-97; Joint Exs. 26 and 27.) Additionally, Central Hudson used its own internal labor on many aspects of the project, which often involved working with live natural gas lines. The work performed by Central Hudson personnel generally involved tasks requiring specialized engineering training in the handling of natural gas, which Central Hudson employees possessed. (Tr. 608.)

In order to connect the WSR to the PK Line running to Kingston, additional work was required at a location some distance from the regulator station itself. That is, excavation away from the regulator station revealed that part of the line was not the full required 8-inch diameter pipe, but instead was a much smaller diameter line. The small line was removed in its entirety and a new length of 8-inch pipe was installed in its place. (Tr. 587-92; Joint Ex. 28.)

During construction of the WSR, the PK Line was tested for contamination with environmentally-toxic polychlorinated biphenyls (“PCBs”). (Tr. 978-80.) The testing revealed elevated levels of PCBs in the PK Line river crossing. Thus, in the spring of 2000, Central Hudson engaged divers to cut back sections of the river crossing and cap the line to avoid further leakage. (Tr. 608-09.) To date, Central Hudson has taken no further action to resolve this problem. (Tr. 675-76.)

B. Costs of Responding to the Incident

Central Hudson maintained internal accounting procedures to record all the costs associated with the various projects it undertook. Shortly after the Incident, Central Hudson set up a new account number, called a “work order” number, for the purpose of “collecting” costs that it considered to be associated with the Incident. (Tr. 632:2-14.) The work order actually consisted of two separate accounts labeled “4490A” and “4490R” (collectively the “work order” or “collect-cost work order”). Work order 4490A, (Joint Ex. 12), encompassed construction costs associated with the WSR, whereas work order 4490R covered charges for removal of scrap materials and other related costs (Joint Ex. 13). (Tr. 1202.)

Central Hudson did not open separate work orders for each of the various tasks associated with its response to the Incident, however, but instead aggregated all of its response costs into the two portions of the collect-cost work order. (Tr. 631-34.) Central Hudson hired outside contractors to inspect its river crossings, perform the minor repairs to the TP river crossing and perform construction work on the WSR. These costs were recorded to the collect-cost work order. (Tr. 607-08.) Central Hudson also recorded under the collect-cost work order several other categories

of costs it considered to be associated with the incident, including its own internal labor costs, vehicle costs, materials from stores costs, and certain overhead costs. (Tr. 632.) These costs, including overhead, amount to \$376,278 and include: (1) \$78,120 in amounts paid to salaried employees; (2) \$10,171 in materials and supplies; (3) \$4,466 in transportation costs; (4) \$34,950 in funds paid to hourly employees; and (5) accounts payable expenses of \$250,555.⁹ Of the total listed on the work order, a significant portion consisted of overhead. Defendants concede that Central Hudson is entitled to payment for its out-of-pocket expenses, including payments to third-party vendors, consumables taken from stores and sales taxes paid, but contend that the remaining charges listed on the collect-cost work order, including internal labor costs and overhead, are unjustified and unrecoverable. Defendants, having their own itemization of the costs of responding to the Incident and constructing the WSR, calculate Central Hudson's damages for its emergency response costs and construction of the WSR to be \$252,807.96.

As a preliminary matter, we note that Central Hudson's use of its own personnel to carry out numerous repairs does not preclude its recovery for the cost of their labor.¹⁰ We note, however, that Central Hudson's records do not indicate what specific work was performed by an employee on any given day (Tr. 633-35), and, indeed, Central Hudson concedes that some of the costs recorded in the work orders include employee time spent preparing for this litigation. (Tr. 358-59, 386-87.) Because

⁹ The term "accounts payable" refers to costs paid based on an invoice from a contractor or a vendor or to a Central Hudson employee who charged costs to the work order. (Tr. 1211.) Croshier, Central Hudson's General Accounting and Plant Accounting Manager, conducted a review of all the supporting documentation under this category (Joint Exs. 14 and 15) and confirmed that all the vouchers were processed and posted in accordance with normal Central Hudson utility accounting. (Tr. 1224.)

¹⁰ See *infra*, part VI.

of the way Central Hudson maintained its records, it is impossible from the face of the work order to distinguish these costs from those incurred doing engineering work in response to the incident. (Joint Exs. 12 and 13.) Although we find this accounting practice problematic, considering the evidence before the Court detailing Central Hudson's response to the Incident and construction of the WSR, we nonetheless find that the vast majority of Central Hudson's engineers' time was billed for legitimate purposes. Thus, except as detailed *infra*, we find that Central Hudson may recover its claimed labor costs.

One entry, however, is clearly not compensable. Specifically, the evidence showed that Central Hudson completed work on the WSR in December of 1999 and filed its Complaint in the present case on August 7, 2002, yet its records show that between September 2002 and August 2003, Central Hudson engineer Lawrence Cambalik billed \$13,619 worth of work, which he characterized as almost entirely related to litigation. (Tr. 359.) Plainly, such costs are not recoverable, and must be deducted from the \$78,120 in permissible charges for the work of salaried employees. Notably, Cambalik testified that he was the only Central Hudson engineer who gathered information for the purposes of preparing for this litigation. (Tr. 359-61.)

Central Hudson's claims for overhead were points of great contention at trial. In computing overhead, Central Hudson marked up the various internal labor and materials costs to apportion a share of certain burdens (*e.g.*, vacation, sick days,¹¹ health benefits, pension and insurance

¹¹ Central Hudson, for the purposes of its own internal accounting methods, classified "lost time" as a non-overhead expense. Nonetheless, it is no more specifically related to the individual items on the work orders than any of the claimed expenses that Central Hudson does classify as overhead, and we thus use the term to refer to both lost time and other related miscellaneous business costs. (*See* Tr. 1294 ("The Court: That's in effect the average amount of lost time for the entire company; that is, a certain percentage of . . . the total time that you pay for is considered to be lost time? The Witness: Correct.").)

obligations, purchasing expenses and taxes) it incurred for all employees and material used on a company-wide basis. (Tr. 1246-50; Joint Exs. 73 and 74.) This overhead reflected average projected costs associated with Central Hudson employees and assets of the relevant types. Central Hudson also applied “accounting and administrative” overhead to the entire work order. This mark-up was to allocate to this particular project a share of Central Hudson’s general operating costs.

Defendants contend that Central Hudson’s overhead is not recoverable, as it has submitted no evidence to demonstrate that any of the aforementioned costs bore a direct relationship to work actually performed in response to the Incident. Defendants’ argument, however, misapprehends the nature of overhead, which constitutes “business expenses (as rent, insurance, or heating) not chargeable to a particular part of the work or product” Merriam-Webster Online Dictionary, *available at* <http://www.m-w.com>.

We have no reason to doubt that the claimed overhead accurately allocates a portion of Central Hudson’s general expenses to the project. In addition to the costs, such as salary or wages, health insurance and pensions, directly associated with the employees that responded to the Incident, Central Hudson no doubt sustained administrative costs whenever it purchased materials or issued paychecks. There is no reason to deny it recovery for these expenses, for they were actually incurred, despite their generic nature. *See United States v. Capital Sand Co.*, 466 F.3d 655, 660 (8th Cir. 2006) (permitting recovery of overheads and stating:

[General and Administrative] overhead covers the work of the administrative divisions—Finance, Contracting, Command, Resource Management, Personnel, Security and Safety . . . all of which played a role in enabling the repair process to happen, yet none having costs easily or directly attributable to this specific project or repair. Anytime a steel beam was ordered or a paycheck was issued for a person working on the repair project, these administrative departments were involved and thus incurred costs related to the repair process. The same is true of Indirect Cost overhead charges. These charges, while again not easily attributable to any one

repair order or broken down by project, are related to the repair process in that they include items such as electricity for the buildings and equipment actually used to make the repairs, the salary of supervisors who oversee a multitude of projects at a time, and the cost of purchasing tools used for a variety of repairs, not just this one in particular.

(internal quotation marks and citations omitted)).

Finally, turning to Central Hudson's requested transportation expenses, for which it seeks \$4,466 (exclusive of overhead, which we have found not to be compensable), we note that they received little attention at trial. Defendants contend that transportation expenses, save for fuel costs, which cannot accurately be determined from Central Hudson's records, are not compensable because Central Hudson did not purchase any new vehicles in order to respond to the Incident. Central Hudson's transportation costs, however, amount to an average charge of \$3.72 per hour,¹² and we find that this value reasonably reflects the cost of fuel and vehicular wear and tear and is therefore compensable.

Accordingly, we find that Central Hudson is entitled to compensation for the following amounts: (1) \$64,501 for employee salaries paid;¹³ (2) \$10,171 for materials and supplies; (3) \$34,950 for hourly wages paid; (4) \$4,466 for transportation costs; and (5) \$250,555 for accounts payable, for a total of \$364,643.

¹² The collect-cost work order shows that 1201.5 vehicle hours were used responding to the Incident and constructing the WSR.

¹³ This value reflects the total amount charged to the collect-cost work order minus the \$13,619 charged by Cambalik for time spent preparing for litigation.

III. Central Hudson's Post-Incident Status

A. Effect of the Incident on Central Hudson's Natural Gas Service

To date, Central Hudson has taken no steps towards repairing or replacing the PK river crossing, (Tr. 99), and has instead determined that it should be “cut, capped, and retired.”¹⁴ (Joint Exs. 6 and 25.) The WSR allows Central Hudson to provide two feeds to the PK Line customers on the west side of the Hudson River and ensures Central Hudson's ability to reliably serve these PK customers indefinitely. (Tr. 1458.)

Central Hudson's analysis of its system confirms that, as currently configured, it is at least as flexible as it was prior to the Incident. Indeed, a study commissioned by Central Hudson and performed by Stoner/Advantica, the designers of Central Hudson's natural gas system-modeling software, confirmed this conclusion. (Defs. Ex. AA.) Using the Stoner/Advantica modeling system, the effect of the loss of each city gate was analyzed with the PK Line river crossing intact and with no WSR, and then again with the WSR in place but with no PK river crossing.

The study concluded that, with the loss of any one of three of the city gates, the system performed equally well with or without the PK river crossing. As to the loss of the fourth city gate, namely, Pleasant Valley, where Central Hudson connects to the Iroquois system on the east shore of the river, the study determined that Central Hudson's system would suffer a pressure failure in either circumstance, but that the system would actually survive for about three hours *longer* with the WSR than it would with the PK Line river crossing. (Tr. 1125-26; Defs. Ex. AA.) The study thus “[could not] recommend the replacement of the PK Line in any form.” (Defs. Ex. AA, Conclusions.) This conclusion explains why Central Hudson has taken no steps to repair or replace the PK Line

¹⁴ The term “retired” generally means taken out of service forever. (Tr. 1607.)

crossing in any form. (Joint Exs. 5 and 6.)

B. Effect of the Incident on Central Hudson's Propane-Air Capacity and Ability to Meet Customer Demand for Gas on High-Demand Days

In addition to its natural gas sources, Central Hudson maintains two propane-air injection plants in its system, one in Poughkeepsie and one in Newburgh, which it can use to supplement its local gas supply on days of high demand by injecting a propane-air mixture into the system. (Tr. 1077.) Presently at issue is the Poughkeepsie propane-air plant, which is located in the Poughkeepsie Receival Station on the east side of the Hudson River and feeds the system just "downstream" from the regulator station in Poughkeepsie. (*Id.*)

Prior to the Incident, the Poughkeepsie propane-air plant was capable of supplying propane-air to PK Line customers on the west side of the Hudson River. (Tr. 1079-80.) With the loss of the PK river crossing, Central Hudson can no longer transport propane-air across the river, and the Poughkeepsie propane-air plant is thus limited to serving customers on the east side of the Hudson River. (Tr. 1080.) As a result, notwithstanding the fact that its natural gas system has not suffered any decrease in reliability as a result of the replacement of the PK river crossing with the WSR, Central Hudson contends that its system has nevertheless been degraded because it is no longer able fully to utilize the Poughkeepsie propane-air injection plant.

Propane has slightly different heating qualities than natural gas and thus can be injected into the system only up to a certain maximum ratio of propane to natural gas. (Joint Ex. 30 at CH 3266-67.) Accordingly, the extent to which the propane from this plant can be utilized is limited by the quantity of natural gas that is demanded by customers. Thus, the extent to which Central Hudson can inject propane into its system varies with system demand, which itself varies from day to day

depending on a number of different factors, including local weather conditions. (*Id.* at CH 3282.)

Because of the extremely high cost of producing propane-air mixture, it is typically used as a fuel source of last resort only when natural gas is unavailable. Typically, Central Hudson has run its Poughkeepsie propane-air plant only for several hours in any given year, when it either wished to train its employees or test the plant's operational effectiveness. (Tr. 1173-76.) Nonetheless, if it so desired, Central Hudson could, on a design day, utilize up to ninety-three percent of the propane-air plant's capacity despite the loss of the PK crossing, although it should be emphasized that it never has attempted to use so much propane-air. (Joint Ex. 30.)

Accordingly, this Court rejects Central Hudson's contention that it is not presently able to fully utilize the Poughkeepsie propane-air plant as a result of the Incident. Central Hudson has failed to demonstrate any reason why it would *ever* be necessary or even desirable to fully utilize the Poughkeepsie propane-air plant. Central Hudson admits that the price of propane has, historically, *always* exceeded that of natural gas, (Tr. 1480), and Central Hudson has not even alleged that it suffered any decrease in revenues or increase in operating costs as a result of its decreased ability to utilize the plant.

Central Hudson's lack of concern for the nominal diminution in utilization of potential output from the propane-air plant is illustrated by the fact that it failed to procure additional "peaking gas supply contracts" as a result of the Incident. (SAF ¶ 13.) Peaking gas contracts are option contracts for Central Hudson to take additional natural gas through the city gates, up to an agreed amount and up to an agreed maximum number of days. As the name implies, these contracts are designed to assist Central Hudson in meeting unusually high demand for natural gas which occurs on a small number of peak demand days, *i.e.*, days in which the temperature is unusually low. (Tr. 1470.)

Central Hudson's decision not to purchase peaking gas contracts confirms the Court's finding that the Incident caused no significant adverse effect on the Central Hudson system that was not more than offset by the construction of the WSR.

In short, Central Hudson has demonstrated no practical need to send propane-air to the PK customers on the west side of the river, (Tr. 1438-39), and the 2005 Stoner /Advantica study shows that, even with the propane-air plants running at full capacity, the PK customers on the west side of the Hudson River were no better served with the PK Line river crossing than with the WSR. (Defs. Ex. AA.) Accordingly, we find that Central Hudson's inability to provide the west shore PK Line customers with propane-air as a result of the severing of the PK river crossing does not significantly diminish Central Hudson's ability to utilize its Poughkeepsie propane-air plant to meet peak demand or otherwise have an adverse impact on Central Hudson's services or revenues.

C. Replacement of the PK Line River Crossing is Unjustified Under the Circumstances

As the foregoing has demonstrated, Central Hudson's response to the Incident of reconfiguring its system by installing the WSR and connecting the PK distribution line to the TP transmission line on the west shore of the Hudson River fully addressed all of Central Hudson's supply and reliability concerns arising from the Incident and rendered Central Hudson's gas network even more reliable than it was prior to the Incident. Accordingly, the Court finds that Central Hudson has no need to also repair or replace the PK pipeline river crossing of the Hudson River. This is confirmed by Central Hudson's own actions in not even beginning to plan its replacement in the seven and one half years since the Incident. Our finding in this regard obviates the need to address the various proposals for replacement of the PK Line river crossing, along with their

respective costs.

IV. The Fate of the PK Line

As stated previously, pursuant to EPA regulations, Central Hudson tested the damaged segments of the PK Line for PCB contamination, which revealed that the line was severely contaminated. (Tr. 974-77.) As a result, Central Hudson cut out the damaged pipe fragments, removed them from the river, and capped the ends of the pipeline remaining in the river (with river water trapped inside) to prevent the escape of PCB contaminants. (Tr. 283.) The removed pipe segments were disposed of in an approved facility. (Joint Exs. 57 and 58.) To date, Central Hudson has done nothing further to treat the pipeline segments remaining in the river to permanently address the problem of PCB contamination. Central Hudson now seeks damages for the cost of decontamination and removal of the PK Line segments from the river bottom, while defendants contend that the proper measure of damages is the cost to seal and abandon the pipe segments in place in accordance with the applicable environmental regulations.

A. Abandonment of the PK Line in Place

40 C.F.R. § 761.60(b)(5)(i)(C) sets forth the acceptable methods for treating PCB-tainted pipelines, and provides as follows:

Natural gas pipe of any diameter which contains PCBs at any concentration but no free-flowing liquids, may be abandoned in the place it was used to transport natural gas, if each end is sealed closed, and either:

(1) The interior surface is decontaminated with one or more washes of a solvent in accordance with the use and disposal requirements of § 761.79(d). This decontamination process must result in a recovery of 95 percent of the solvent volume introduced in to the system, and the PCB concentration of the recovered wash must be <50 ppm (see § 761.79(a)(1) for requirements on use and disposal of

decontaminating fluids).

(2) The pipe is filled to 50 percent or more of the volume of the pipe with grout (such as a hardening slurry-like cement, bentonite, or clay) or high density polyurethane foam (except that only cement shall be used as grout under rivers or streams) and each end is sealed closed.

Likewise, Central Hudson's own "Gas Operating and Maintenance Procedure No. 385," March 2003 provides that, for pipes greater than 4 inches diameter containing PCBs, all free flowing liquids must be drained and the pipe either cleaned and decontaminated or filled with an approved grout. (Joint Ex. 36 at CH 2962-63.) Indeed, the parties agree that Central Hudson is required by law to remove the water contained in the pipe sections remaining in the river and fill them with cement, but disagree on whether Central Hudson must decontaminate the pipe sections and physically remove them from the river bottom. (Tr. 1038-39, 1665-71.) Central Hudson contends that, in the interest of preserving the environment and maintaining a clear navigation channel, it should be awarded damages for the cost of removing the pipeline from the river, which far exceeds the cost of abandoning the pipeline in place.¹⁵ We disagree with Central Hudson's contention that the PK Line remnants must be removed, and find abandonment in place to be the proper remedy.

In the more than seven years since the Incident, Central Hudson has taken no action to address the remaining sections of the PK river crossing, (Tr. 173-75, 1045-47), and, as a preliminary matter, we note that no evidence adduced at trial suggested that the pipe sections remaining in the Hudson River constitute a hazard to navigation. The segments presently are lying on the river bottom at a depth of fifty to sixty feet—well below the draft of vessels that ply the Hudson River in that location, and Central Hudson itself has admitted that no imminent hazard exists. There is

¹⁵ As estimated by Central Hudson, the respective costs of removal and abandonment in place are \$530,000 and \$272,400. (Pl. Exs. 141, 142 and 167.)

likewise no evidence to suggest that the pipe sections remaining in the Hudson River are likely to become a hazard to navigation at any time in the foreseeable future. (Tr. 675-77, 1512-17.)

Moreover, Central Hudson submitted no evidence to suggest that the rules or regulations governing abandonment in place of PCB-contaminated pipe are expected to change at any point in the foreseeable future such that removal of the pipe would later become necessary. To the contrary, Central Hudson's environmental expert admitted that he was aware of no such proposed changes. (Tr. 1665-66.) Thus, putting aside, for the moment, our environmental concerns, we note that Central Hudson has shown no reason why the PK Line fragments cannot lawfully be abandoned in place.

Additionally, the evidence strongly indicates that abandonment in place is the most environmentally-friendly course of action. The parties' respective environmental experts agreed that the removal of the PK Line remnants would result in substantial disturbance of the sediment—and resuspension of existing PCB contaminants therein—no matter what method of removal is used. (Tr. 1680-84, 1944-45.) Abandonment in place, by contrast, would result in only minimal sediment disturbance resulting from diver activity in the area of the two pipe ends and from anchor or spud barge activity in connection with the work. (Tr. 1680-84, 1944-46.) Given the significant preexisting level of sediment contamination in the area,¹⁶ the bottom disturbance that would result from removal of the PK river crossing remnants is ultimately more likely to be of significant concern to the environmental regulators than the potential eventual release of the PCBs from a half-inch-thick steel pipe that is properly sealed and abandoned in place in accordance with the applicable EPA regulations. (Tr. 1706-10.) We therefore find the appropriate treatment of the PK Line river crossing

¹⁶ The evidence adduced at trial revealed that the subject area of the Hudson River has been significantly contaminated with PCBs due to factors unrelated to this litigation.

to be abandonment in place in accordance with the requirements set forth in 40 C.F.R. § 761.60.

B. Cost of Abandonment in Place

The Court received significant testimony and documentary evidence concerning the cost of abandoning the PK river crossing in place. The abandonment proposal drafted by Eric Skonberg, defendants' expert, involved tapping into the pipe remnants from a floating platform and pumping cement into them to displace the PCB-contaminated water out of the pipe and into tanks on a barge. (Tr. 1998.) Skonberg estimated total costs of the operation at \$203,300,¹⁷ plus an additional \$15-20,000 in permitting costs. Roger Trettel, defendants' environmental permitting expert, testified, however, that he did not agree with Skonberg's proposal to displace the PCB-contaminated water with inert cement or grout, citing his concern that the PCBs would mix with or be covered by the cement mixture and remain trapped in the pipeline. (Tr. 1954.)

We share Trettel's concern, and thus do not find this aspect of the Skonberg method appropriate. Central Hudson, however, has presented the Court with little evidence on the cost of alternative methods. Although we accepted into evidence a brief abandonment proposal provided to Central Hudson by Miller Environmental Group, Inc. ("MEG") (Pl. Ex. 167), this proposal,

¹⁷ Skonberg originally estimated the cost of abandonment in place to be \$191,300, assuming the length of the PK crossing to be 2,400 feet. This higher value reflects the cost to treat and abandon 4,000 feet of piping, (Tr. 2002-03, 2006), a number proposed by plaintiff. Paragraph 19 of the SAF states that "[t]he length of the PK river crossing is approximately 3,125 feet, which is shore to shore as measured on a line drawing of the river crossing." The additional 875 feet, according to plaintiff, (Tr. 1408-10) reflects lengths of piping on either bank of the river that also would require treatment. Skonberg, who presented the most comprehensive and credible evidence on the cost of abandonment, testified that, in any event, the cost of abandonment would be similar for any of the three proposed lengths of pipe, with any difference reflecting the varied amounts of concrete required in each case.

although obtained in 2004, was not provided to defendants until the first day of trial. The MEG estimate calculated the cost of abandoning the line in place at \$272,400. Notably, however, no one from MEG was called as a witness at trial to explain the estimate in detail. Although we do not doubt the authenticity of this document, and thus accepted it into evidence at trial, we nonetheless attribute to it less weight than we would were it substantiated by live testimony.¹⁸

Accordingly, having considered the relevant documentary and testimonial evidence, we find the cost of abandoning the PK Line in place to be midway between \$203,300 and \$272,400 or \$237,850, plus \$17,838.75 in administrative and accounting overhead. We further find the cost to procure the appropriate environmental permits to complete the work to be \$15,000, as both parties' environmental experts testified that it was likely that abandonment of the pipeline would fall under the ACOE's "nationwide permit," a general grant of permission to maintain existing aquatic and marine structures, and thus require that few, if any, specific permits be obtained. The total cost of abandonment of the PK Line in place is \$270,688.75.

¹⁸ Central Hudson also contends that the Court should add to the MEG estimate: (1) administrative and accounting overhead in the amount of \$20,430, or 7.5 percent of the MEG estimate; (2) engineering reviews and permitting costs in the amount of \$27,240, or ten percent of MEG's estimated cost; and (3) "[f]ield engineering and [e]nvironmental oversight" costs in the amount of \$27,240, also ten percent of the estimated cost of abandonment, for a total cost of \$347,310. (Pl. Ex. 97.) Aside from its accounting and administrative overhead, however, Central Hudson has offered no evidence as to why overhead costs would be incurred when its own employees would not be involved in the project, except for in very limited oversight and observational roles.

Although we previously held that certain overheads requested by Central Hudson were compensable, a significant portion of such overhead was related to the cost of using substantial Central Hudson equipment and manpower. Moreover, as detailed *infra*, we find Central Hudson's estimated permitting cost to be greatly exaggerated under the circumstances. We therefore find these additional costs, other than \$17,838.75 in administrative and accounting overhead, unsubstantiated by the evidence.

V. The Loss of Central Hudson’s Riverbed Easement

Central Hudson also contends that the riverbed easement upon which the PK Line lies, which was originally granted to it by the State of New York when the line was constructed, will expire if and when it is not used for its specified purpose for more than a year. This statement accords with the terms of the easement, although Central Hudson President, Carl Meyer, stated that the easement has been temporarily extended during the pendency of this litigation. (Tr. 161.) Central Hudson further contended at trial that the New York Office of General Services (“OGS”) would likely direct Central Hudson to remove the PK Line remnants once the easement lapsed. The Court finds, however, that Central Hudson has not established by a preponderance of the evidence that it would be required to remove the PK Line remnants from the Hudson River. Indeed, the evidence supports the opposite conclusion.

The easement nowhere states that Central Hudson must remove the pipeline upon discontinuation of its use. It merely provides that, “in case the Board of Commissioners of the Land Office so direct, the grantee herein named shall transfer and relocate all its structures placed upon the lands above described to another location[]” (Joint Ex. 94 at CH 346.) It is clear from this language that removal of the PK Line fragments is not specifically required by any triggering event. Rather, upon lapse of the easement, the state has discretion to direct Central Hudson to move its pipeline. To date, Central Hudson has received no request to do so.

The parties’ experts agree, moreover, that in making any decision about whether to require removal of the PK river crossing, environmental issues would be of paramount importance to the

OGS and other agencies involved¹⁹ (Tr. 1638, 1708, 1938), and, as stated previously, the evidence has shown abandonment of the fragments in place to be the most environmentally-sound course of action. We have no reason to believe that the State of New York would order the pipeline's removal when its treatment and abandonment is both economically and ecologically wiser.

Additionally, Central Hudson's environmental expert admitted that it would be possible for Central Hudson to apply for and obtain a "waiver" of any requirement imposed by the OGS to remove the PK Line. (Tr. 1644.) Central Hudson has provided no evidence that such a waiver would not be obtainable in the present case. Indeed, as noted above, it seems likely that such a request by Central Hudson would be given favorable consideration by the OGS.

In view of our prior findings, we conclude that Central Hudson has failed to show by a preponderance of the evidence that the OGS would require removal of the PK river crossing over the alternative of abandoning the pipeline in place in accordance with the applicable regulations. Just the contrary, the evidence suggests that the OGS would take the opposite view under the circumstances.

Accordingly, although the Incident ultimately led to the loss of Central Hudson's easement, we find that the easement was archaic and of only nominal value in light of modern environmental practices and the fact that the loss of the pipeline once occupying the easement has been more than offset by the creation of the WSR.

¹⁹ Indeed, the New York regulations which govern the OGS specifically declare their "purpose and intent" to be to "manage the State's interest in its underwater lands, to regulate the projects and structures constructed in or over such underwater lands consistent with the public interest in ... environmental and aesthetic protection" (OGS R. & Regs. Chapter § 270-1.1.)

VI. Total Damages Resulting From the Incident and Central Hudson's Comparative Negligence

A. Central Hudson's Damages for Defendants' Negligence

“In admiralty cases, federal maritime law applies where it exists.” *Becker v. Poling Transp. Corp.*, 356 F.3d 381, 388 (2d Cir. 2004) (quoting *Mentor Ins. Co. (U.K.) Ltd. v. Brannkasse*, 996 F.2d 506, 513 (2d Cir. 1993)). “Additionally, federal maritime law incorporates common law negligence principles generally, and New York law in particular.” *Becker*, 356 F.3d at 388; *see also Just v. Chambers*, 312 U.S. 383, 388 (1941) (“With respect to maritime torts we have held that the State may modify or supplement the maritime law by creating liability which a court of admiralty will recognize and enforce when the state action is not hostile to the characteristic features of the maritime law or inconsistent with federal legislation.”). In the present case, wherein defendants have conceded that they acted negligently in causing the anchor-dragging, our inquiry is limited to assessment of the extent of damages and a determination of the degree to which Central Hudson itself was comparatively negligent in failing to take steps to reduce the hazard that the PK Line might be snagged by dragging anchors.

When determining damages, we must be mindful of the principle that, in a negligence action, damages generally serve a compensatory function and must therefore be tailored to place the aggrieved party in as good a position as he was in before the accident. *See, e.g., Standard Oil Co. of N.J. v. S. Pac. Co.*, 268 U.S. 146, 155 (1925) (“It is fundamental in the law of damages that the injured party is entitled to compensation for the loss sustained. Where property is destroyed by wrongful act, the owner is entitled to its money equivalent, and thereby to be put in as good position pecuniarily as if his property had not been destroyed.”); *McDougald v. Garber*, 73 N.Y.2d 246, 253-54, 536 N.E.2d 372, 538 N.Y.S.2d 937, 939 (1989) (The purpose of “an award of damages to

a person injured by the negligence of another is to compensate the victim[] The goal is to restore the injured party, to the extent possible, to the position that would have been occupied had the wrong not occurred.”) (internal quotation marks omitted); *Scalp & Blade, Inc. v. Advest, Inc.*, 309 A.D.2d 219, 225, 765 N.Y.S.2d 92 (4th Dep’t 2003) (“[T]he object of compensatory damages is the same, *i.e.*, to make the plaintiff whole In a tort case, [c]ompensatory damages, whether general or special, serve to make good, so far as it is possible to do so in dollars and cents, the harm done by a wrongdoer”) (internal quotation marks omitted; citations omitted).

With this principle in mind, we again consider whether internal labor costs and company overhead are recoverable, as the issues proved to be significant points of contention at trial. We reiterate that the time charged by Central Hudson employees was billed in accordance with Central Hudson’s standard business practices and the performance of this unanticipated labor by Central Hudson personnel necessarily precluded them from performing other, planned work. *See Freeport Sulphur Co. v. The S/S Hermosa*, 526 F.2d 300, 303 (5th Cir. 1976) (rejecting defendant’s argument that internal labor costs were not compensable because plaintiff’s decision not to hire outside workers meant that its own workers must have been idle because: “[i]t [was] at least as plausible that there were other . . . projects that would have been worked on by [plaintiff’s] internal engineers, but were not of such an emergency nature that they required the immediate employment of the outside firm.”) (footnote omitted).

Additionally, the Second Circuit, construing New York negligence law, has stated that: “It is [a] fundamental principle that reasonable expenses, including overhead expenses, incurred as a result of a breach of contract or a tortious act are proper items of recoverable damages.” *William Wrigley Jr. Co. v. Waters*, 890 F.2d 594, 604 (2d Cir. 1989) (awarding overhead where underlying

action based on negligent performance of services and breach of contract). Defendants note that in *Central Hudson Gas and Electric Co. v. M/V Lunamar II*, 1992 A.M.C. 1723, 1726-27 (S.D.N.Y. 1992), *aff'd*, 993 F.2d 1534 (2d Cir. 1993) (affirming without opinion), the district court stated that although

reasonable overhead which plaintiff would have had to pay others may be charged according to some authorities, overhead and administrative costs, if unrelated to the specific additional work required because of defendant's conduct, may be unreasonable. While a blanket overhead percentage may be agreed upon in contractual dealings, defendants did not bargain to contribute to such costs and any overhead would be nonconsensually imposed by the court. Thus, either an arm's length bid by a contractor for the work including overhead, similar comparable information, or a breakdown of overhead related to the actual tasks imposed by defendant's conduct would appear appropriate. Plaintiff's own general overhead figure as a public utility, embracing numerous irrelevant activities, is not necessarily applicable.

However, the *Central Hudson* decision appears to be at odds with the Second Circuit's ruling in *Wrigley*, which permitted the imposition of substantial overhead where it "adequately reflected the extra expense incurred . . . due to defendants' negligence." *Wrigley*, 890 F.2d at 604.²⁰

We agree with the Eighth Circuit's assessment that

By definition, overhead expenses . . . cannot be easily identified with any individual product or repair. . . . The purpose of overhead is to allow a company to recover its general operating expenses, which are not directly allocable to a particular project. . . . This recovery is allowable as part of the cost of repairs even if the party suffering an injury decides to make the necessary repairs itself, as any company hired to do the repairs would have included overhead charges in its bill to the injured party.

United States v. Capital Sand Co., 466 F.3d 655, 658-59 (8th Cir. 2006) (internal quotation marks

²⁰ In *Wrigley*, the Second Circuit affirmed the district court's grant of "overhead equal to salary" of \$31,759.09, which in that case amounted to forty-eight percent of the court's total award of \$66,149.94. *Id.* at 604. The amount requested by Central Hudson, namely \$48,416, amounts to less than thirteen percent of the \$376,278 claimed for the cost of responding to the Incident and constructing the WSR.

omitted; citations omitted). This approach is consonant with the outcome in *Wrigley* as well as the general principle that “the purpose of compensatory damages is to replace the loss directly and proximately caused by a party’s breach of contract or tortious conduct.” *Wrigley*, 890 F.2d at 604. Accordingly, because we find that Central Hudson’s internal labor costs and overhead expenses represent an appropriate portion of its losses in connection with the Incident, we conclude that they are properly recoverable as compensatory damages for defendants’ negligence.

Thus, for the reasons previously set forth in greater detail, we hold that Central Hudson’s monetary damages resulting from the Incident amount to: (1) \$6,700 for replacement of the protective coating on its HR/DR electrical lines; (2) \$8,439 for lost natural gas; (3) \$1 for loss of its easement to lay the PK Line on the bottom of the Hudson River; (4) \$364,643 for Incident response costs and construction of the WSR; and (5) \$270,688.75 (including \$17,838.75 in overhead and \$15,000 in permitting costs) for the cost of abandoning the PK Line remnants in place in accordance with the applicable environmental regulations, for a total of \$650,471.75. Such damages shall, as mentioned above, be reduced in proportion to Central Hudson’s own comparative negligence.

B. Central Hudson’s Comparative Negligence

Our inquiry does not end, however, with a determination of Central Hudson’s losses incurred as a result of the Incident, for we still must consider whether defendants have met their burden of proving that Central Hudson’s comparative negligence contributed to the Incident. Both New York law and federal maritime law employ a pure comparative negligence standard, apportioning loss in direct proportion to the degree of fault. *See United States v. Reliable Transfer Co.*, 421 U.S. 397, 411 (1975) (“[W]hen two or more parties have contributed by their fault to cause property damage

in a maritime collision or stranding, liability for such damage is to be allocated among the parties proportionately to the comparative degree of their fault”); *Shanahan v. Orenstein*, 52 A.D.2d 164, 169, 383 N.Y.S.2d 327 (1st Dep’t 1976) (“[U]nder [N.Y.C.P.L.R.] § 1411, the doctrine of pure comparative negligence is now adopted, permitting plaintiffs who are contributorily negligent to receive proportionately diminished recoveries.”).

“In order to establish comparative negligence, the defendants must establish each of the following elements by a preponderance of the evidence: (1) that [plaintiff] failed to exercise that degree of reasonable care that a reasonable person under similar circumstances would exercise—that is, that he was negligent; (2) that plaintiff’s injuries were a reasonably foreseeable consequence of plaintiff’s conduct; and (3) that plaintiff’s injuries were proximately caused by his conduct.” *Clark v. Westchester County*, No. 96 CIV. 8381, 1998 U.S. Dist. LEXIS 15912, at *6 (S.D.N.Y. Oct. 9, 1998).

Having considered the documentary and testimonial evidence, the Court finds that Central Hudson failed to take reasonably prudent and recommended measures to protect the PK river crossing from external damage and that Central Hudson’s losses were a proximate and foreseeable result of that failure. As discussed previously, Central Hudson was warned as early as 1983 by contractors it hired to inspect its river crossings that the PK Line was exposed and in places suspended above the river bottom. (Joint Ex. 121 at LO 103.) The contractors *specifically* warned that this exposure and suspension substantially increased the risk of damage by ship anchors and recommended corrective action. (*Id.* at LO 104; Joint Ex. 81 at CH 553.)

In 1991 divers warned that the suspended and exposed areas had more than doubled. (Joint Ex. 122 at LO 182.) They again warned that this increased the risk of damage and recommended

corrective action. (*Id.* at LO 181.) Central Hudson took no action in response to these warnings. While Central Hudson took measures to protect its HR/DR electrical cables and TP river crossings by covering them, at least in part, with protective rock, Central Hudson took no steps to protect the PK river crossing. (Tr. 297, 302-04, 1583-85.) This failure is surprising in view of the fact that Central Hudson's electrical cables sustained damage due to an anchor dragging only three years earlier. *See Central Hudson Gas & Elec. Co. v. M/V Lunamar II*, 1992 A.M.C. 1723. This incident should have made Central Hudson acutely aware of the need to protect its river crossings and, indeed, Schick testified that he was fully aware that exposed or suspended pipe is at greater risk for damage by external forces such as anchor strikes. (Tr. 1569-70.)

The evidence indicates that a protective rock covering probably would have prevented or at least substantially lessened the damage. Central Hudson's own witnesses admitted that the rock cover on the TP pipeline likely saved it from damage, (Joint Ex. 9 at CH 2463), and that the rock covering the intersection of the PK and TP Lines actually protected a substantial portion of the PK Line from damage as well. (Tr. 375-77, 1580-82.). The evidence strongly indicates that if the remainder of the PK Line had been properly supported and covered with rock, the damage could have been minimized or avoided altogether.

Accordingly, the Court finds that Central Hudson breached its duty to exercise due care not to expose its property to an unreasonable risk of damage and therefore bears comparative fault for the damage sustained in the Incident. Specifically, we find that Central Hudson's negligence was twenty-five percent responsible for the damages sustained in the present case, and its award of damages must be correspondingly reduced to \$487,853.82.

Our conclusion is consistent with that reached by Judge Pollack in *Arabian American Oil*

Company v. Hellenic Lines, Ltd., 633 F. Supp. 659, 670 (S.D.N.Y. 1986). In *Arabian American*, a vessel impacted an unmanned oil platform located in the Persian Gulf region, causing severe damage to both the ship and the platform. *Id.* at 660. At the time of the collision, the ship was not using its radar, which, if properly operated, had a one hundred percent chance of detecting the platform at a distance of more than thirteen nautical miles. *Id.* at 661. Additionally, the ship's captain failed to post a look-out on the bow of the ship, as was the customary practice when sailing in the oil-platform-dotted region, *id.* at 661, and was navigating using outdated charts. *Id.* at 660 n.2. After colliding with the platform, the captain failed to take customary safety precautions and then tampered with his trip charts in order to mask the fact that the ship was off course at the time of the impact. *Id.* at 662-63.

Nonetheless, because “[t]he platform was not equipped with a device to produce an audible sound signal to approaching vessels; it lacked functioning night lighting; [and] notification of its presence was not given to navigational authorities[,]” the court held that the plaintiff was one third comparatively negligent, and reduced its award accordingly. *Id.* at 669. Likewise, we find that Central Hudson’s failure to take the recommended measures to protect the PK Line from harm,²¹ namely its failure to correct the extensive suspensions and exposures of the PK Line despite the explicit warnings of its own diving experts, partially contributed to the Incident. Indeed, the evidence clearly demonstrated that Central Hudson’s cavalier attitude toward the maintenance of the PK Line accurately reflected the line’s lack of importance to the Central Hudson network. The fact that Central Hudson went to great lengths to stabilize and protect the nearby TP Line—which ultimately saved that line from sustaining considerable damage—but left the PK Line unprotected

²¹ See *supra*, pp. 6-8.

despite the fact that over eighty percent of its length was exposed or suspended and despite knowledge that Central Hudson's other river-crossing lines had been severely damaged by past anchor draggings, reinforces this Court's finding that the PK Line should not be replaced.

VII. Prejudgment Interest

Central Hudson also seeks prejudgment interest, which is awarded in admiralty cases absent exceptional circumstances. *Mentor Ins.*, 996 F.2d at 520 ("It is firmly established that allowance of pre-judgment interest in admiralty [actions] . . . should be granted in the absence of exceptional circumstances . . . and that the rate of pre-judgment interest is within the broad discretion of the district court.") (internal quotation marks omitted; citations omitted). Such interest is awarded to compensate the aggrieved party "for the loss of use of money due as damages from the time the claim accrues until judgment is entered[] . . ." *City of Milwaukee v. Cement Div., Nat'l Gypsum Co.*, 515 U.S. 189, 196 (1995). "A plaintiff is entitled to the income which the monetary damages would have earned, and that should be measured by interest on short-term, risk-free obligations." *Transatlantic Marine Claims Agency, Inc. v. M/V "OOCL Inspiration,"* 137 F.3d 94, 104 (2d Cir. 1998).

Although we are required to impose prejudgment interest in the present case, which involves no exceptional circumstances, "[i]t is within the broad discretion of the district court to determine the rate of interest and the date on which it commences." *Indep. Bulk Transp., Inc. v. Vessel "Morania Abaco,"* 676 F.2d 23, 27 (2d Cir. 1982). Central Hudson contends that the prejudgment interest rate should be measured by the New York nine percent statutory rate. *See* N.Y. C.P.L.R. §§ 5001, 5004. We find more persuasive, however, the rate proposed by defendants, and employed in

Judge Buchwald's decision in *Dessert Service Incorporated v. M/V MSC Jamie/Rafaela*, which calculated interest based on the average annual United States Treasury Bill rate. 219 F. Supp. 2d 504, 509 (S.D.N.Y. 2002). Concluding that "[t]he [treasury bill] rate more closely parallels the income the damages would have earned in a short-term, risk-free investment[,]" Judge Buchwald noted that, although "some courts have adopted state interest rates in federal question cases, it seems to us more appropriate to use a constant federal rate rather than for the outcome to vary depending on where the federal court happens to sit." *Id.* (internal quotation marks omitted; citations omitted); *see also Muller Boat Works, Inc. v. Unnamed 52' House Barge*, 464 F. Supp. 2d 127, 149 (E.D.N.Y. 2006) (calculating rate of prejudgment interest based on average treasury bill yield and citing four district court cases using similar methods). We agree with Judge Buchwald's assessment.

Accordingly, we conclude that Central Hudson is entitled to interest at a rate of 3.73 percent per annum, compounded annually. *See generally* http://www.treas.gov/offices/domestic-finance/debt-management/interest-rate/yield_historical_main.shtml (listing average United States Treasury Bill interest rates from 1990 to present); *see also In re Air Crash near Nantucket Island*, 462 F. Supp. 2d 360, 370 n.12 (E.D.N.Y. 2006) ("In order to adequately compensate the plaintiffs for their deprivation of the use of the award for the . . . duration of this litigation, prejudgment interest should be compounded annually.") (internal quotation marks omitted; citations omitted). Such interest should commence on September 1, 1999, the approximate date on which Central Hudson began in earnest the process of repairing the damage to the PK Line and constructing the WSR. *See Muller Boat Works*, 464 F. Supp. 2d at 149. Moreover, prejudgment interest should not be assessed on the \$252,850 associated with the cost of abandonment in place of the PK Line, because Central Hudson has to date expended no funds on this project, and has thus not been deprived of the use of these

funds. *See Chandler v. Bombardier Capital, Inc.*, 44 F.3d 80, 83 (2d Cir. 1994) (“The purpose of a prejudgment interest . . . is to compensate a plaintiff for the loss of use of money”); *Epter v. N.Y. City Transit Auth.*, 216 F. Supp. 2d 131, 137 (E.D.N.Y. 2002) (“Prejudgment interest serves to compensate for the loss of use of money due as damages from the time the claim accrues until judgment is entered, thereby achieving full compensation for the injury those damages are intended to redress.”) (internal quotation marks omitted; citations omitted).

Accordingly, Central Hudson is entitled to 3.73 percent prejudgment interest, compounded annually from September 1, 1999, on \$284,837.25.²²

²² This figure reflects Central Hudson’s total damages, minus the future cost of abandoning the PK Line, decreased by twenty-five percent to reflect Central Hudson’s level of comparative fault.

CONCLUSION

For the foregoing reasons, we find and conclude that, as a result of the August 8, 1999 anchor dragging incident, plaintiff Central Hudson Gas & Electric Corporation ("Central Hudson") suffered damages in the amount of \$650,471.75. We further find and conclude that Central Hudson's was twenty-five percent comparatively negligent, and its damages must be accordingly reduced to \$487,853.82, plus prejudgment interest on \$284,837.25 at 3.73 percent, compounded annually, from September 1, 1999 to the date of the judgment. No costs or attorneys fees shall be assessed against either party.

SO ORDERED.

Dated: White Plains, New York
July 25, 2007

Handwritten signature of William C. Conner in black ink.

Sr. United States District Judge